## **Abstracts of Work-in-progress**

1. Chi YL, W Yip. The Impact of Health Shocks on Household Consumption and Income in China

*Abstract:* Illnesses and injuries have been shown to be the most unpredictable and widespread risk for household income in the developing world, and can also lead to sizable medical expenditure. McIntyre et al. (2005) show that combined, the total economic cost of illness for households can add up to over 10% of total household income. We use a three-year household survey conducted in the province of Ningxia in Western China to explore the economic consequences of health shocks on Chinese rural households. Using both objective and subjective measures of health shocks, we show that exogenous negative shocks to health are associated with a large increase in medical expenditure as well as a reduction of household wage income. Our analysis suggests that these costs are in turn reflected in household welfare as we find that households experience a shortfall in non-medical consumption (including food consumption) and an increase in uptake of loans in the same year.

2. Han W, W Yip. Can Social Health Insurance Reduce Care-Seeking Delay Among TB Suspects in Rural China?

*Abstract:* Exiting literature documents that there exists significant patientdelay in seeking care among patients with TB symptoms, especially those in rural areas and from lower socioeconomic backgrounds. This paper evaluates a system-wide (as opposed to TB patient specific) policy intervention that provides relatively generous insurance coverage for primary care with the goal to encourage patients with symptoms to seek care early. The paper employed a difference-in-difference methodology exploiting variations in insurance benefit packages across 5 counties and two year's longitudinal household surveys. Our preliminary results show that among patients with high TB knowledge, the intervention led a significant increase in the probability of visiting a doctor especially among village doctors, and also a reduction in using informal care. However, the intervention has no effect on patients with low TB knowledge.

3. Han W, W Yip. Income Elasticity of Demand for Health Care Quality in Rural China

*Abstract:* As China's personal income grows, health care expenditure is also predicted to rise due to increased expectation. In this paper, we explore one possible pathway—how do people's demand for quality of care vary with income growth? We estimated a patient choice model, and then decompose the income elasticity estimated into quality- and other non-quality attributes.

We used data from a two-wave longitudinal household survey collected in 2011 and 2012 from five counties of Ningxia Province (China) with rich information on perceived health care quality as well as health care utilization. Our preliminary results show that for outpatient services, the income elasticity for village clinics and town health centres are negative whereas that for higher-level facility, the county hospital, is positive. For inpatient services, the income elasticity for lower-level facilities. These results imply that lower-level facilities are inferior goods.

4. Fe E, T Powell-Jackson, W Yip. Doctor Competence and the Demand for Healthcare: Evidence from Rural China

*Abstract:* The agency problem between patients and doctors has long been emphasized but there remains little empirical evidence on whether patients recognize and respond to better quality care. Using household data linked to an assessment of village doctors in rural China, we show that there is no correlation between doctor competence and healthcare utilisation, with confidence intervals reasonably tight around zero. Household perceptions of quality are an important determinant of care seeking behaviour yet patients appear unable to recognise more competent doctors -there is no relationship between doctor competence and perceptions of quality.

5. Hafez R, W Yip. The Impact of Health Insurance on Financial Risk Protection: Do Design Features Matter?

Abstract: In 2009, China launched an ambitious health care reform to ensure equal and affordable access to basic health care for all by 2020. As increasingly low and middle income countries move towards expanding their health insurance coverage the more pressing concern is how to design health insurance schemes to ensure individuals access the health care system in the most cost-effective manner. This paper assesses the impact of key health insurance characteristics on financial risk protection by evaluating a scheme that increased reimbursement rates for outpatient services and drugs and established a tiered reimbursement structure in which higher reimbursement rates were given at lower level primary care facilities. We found that the catastrophic headcount significantly decreased by 27 percent and the percentage of households falling into poverty due to medical expenses fell from 5.9 to 2.9 percent in intervention counties relative to comparison counties after two years of implementation. These findings suggest that China's focus on low probability, high cost inpatient care over high probability, low cost outpatient care may be misguided as a growing number of prevalent chronic conditions are left without coverage in outpatient settings.

6. Hafez R, W Yip. The Effect of Price and Quality on Patient's Choice of Provider in Rural Ningxia

Abstract: In health, consumer choice has mostly focused on how demand changes with respect to the price of health care, ignoring other aspects of consumer incentives such as quality. This paper uses cross-county variation in price, as well as other provider specific characteristics such as distance and quality, to explore to what extent patient's perception of health care quality overrides the health insurance price effect in choice of health care facility in rural China. For outpatient services, we find that while at lower levels of household consumption, demand for health care is elastic with respect to price, as income rises past subsistence, individuals begin to value other attributes of health care providers. Overall distance and quality trumped the price incentive of higher reimbursement rates suggesting that further possible gains to financial risk protection may be had by improving quality at village clinics and township health centers and redirecting care from expensive tertiary to cost-effective primary care facilities. For inpatient services, distance and price outweighed quality perhaps suggesting that for more serious conditions, quality measures that focus on the interpersonal relationships with medical staff and amenities are not as important as they are for outpatient care when survival and threat of disability are at stake.

## 7. Hafez R. The Effect of Increased Health Coverage on Household Savings and Consumption

Abstract: In China, the drive to expand health insurance was not only a response to changing patterns of disease, growth in catastrophic health expenditures, and widening regional inequalities, but part of a wider strategy to improve the social security system covering residents in order to increase domestic consumption and maintain strong economic growth. A well-targeted health insurance scheme not only lowers the price of otherwise unaffordable health care but reduces the risk associated with future medical expenses, diminishing the need for precautionary savings and encouraging households to increase consumption on additional medical care as well as nonmedical goods. This paper examined the effect of additional health insurance coverage on households' saving and consumption behaviour using an experiment that varied plan generosity across counties as a measure of variable risk. Households in intervention counties that had more coverage significantly increased food and nonmedical consumption relative to comparison counties. In contrast, the intervention had no impact on savings suggesting that rural households are living very close to their budget constraint and below desired wealth targets. That the added consumption benefits are driven by non-savers reinforce the important welfare enhancing outcomes of health insurance that

are often not considered when discussing the costs and benefits of health insurance schemes.